## **PLTW** Biomedical Science

## **Activity 2.1.1 Student Response Sheet**

## **Part I: Genetic Testing Pre-Survey**

Before we begin our study of genetic disorders and genetic testing, think about each of the following scenarios. Circle true or false in each case and explain why you chose this option.

1.	I feel it is a parent's right to	test a young	child's	predisposition	to
	genetic diseases.				

TRUE FALSE

2. I feel I would like to be tested now to find out if I might have kids with a disease even if it would not affect my own health.

TRUE FALSE

3. I feel all newborn babies should be screened for all known genetic disorders.

TRUE FALSE

4. I feel I would like to be tested now to find out if I might eventually develop a disease (in my 30s and 40s) assuming that treatment might lower my risk.

TRUE FALSE

5. I feel I would like to be tested now to find out if I might eventually develop a disease (in my 30s and 40s) if no treatment is available.

TRUE FALSE

Part II: What is a Genetic Disorder?

Use information from the presentation to help you fill in the "Description" column of the chart.

Type of Genetic Disorder	Description	Example(s) - include information about the cause of the disease as well as how the disease affects the patient.
Single Gene - recessive - dominant - sex-linked		
Multifactorial		
Chromosomal		
Mitochondrial		

Research the following disorders and match them with the appropriate type of genetic disorder. Record information about each disease in the "Example" column of the chart.

- o Duchenne Muscular Dystrophy
- o Cystic Fibrosis
- o Huntington's Disease
- o Down Syndrome
- o Leber hereditary optic neuropathy
- o Alzheimer's Disease